

# Daily GLOWBUGS

## Digest: V1 #132

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE](#)

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%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%%

**Subject: glowbugs V1 #132**

**glowbugs**

**Thursday, October 9 1997**

**Volume 01 : Number 132**

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Date: Wed, 8 Oct 1997 10:47:26 -0500 (EST)

From: "Roberta J. Barmore" <[rbarmore@indy.net](mailto:rbarmore@indy.net)>

Subject: The Sutter Book!

Hi!

Some of you may remember that a very long while ago, I started to do a little book reprinting all of Fred Sutter's "QST" articles (The "QSL-40" and offspring, plus a two-tube regen receiver).

Early on, I got very busy at work, and in spare moments, realized I'd have to get clearance from ARRL -- the articles could still be within copyright and I was hoping to use a couple of Gil cartoons as filler. So the whole thing got put off.

Friday, I wrote to the League, listing the articles etc. and asking permission and today, they allowed as how it would be okay (with some very mild conditions--they want to see any original text added, and would like a copy of the finished book for the library). Hooray! They don't usually do this (after all, they'll sell you the whole shebang in electronic form) but the limited distribution & relatively low numbers made it all right.

Can't promise when it will be ready, but "The Sutter Files" is back on track! More details as things get sorted out.

73,

--Bobbi

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Date: Wed, 8 Oct 1997 21:21:02 -0400 (EDT)

From: kim herron <[kherron@voyager.net](mailto:kherron@voyager.net)>

Subject: Need Phoenix Crystal address

Hi Gang,

Cna someone send me the e-mail address for Phoenix Crystal. I've lost it. Pardon the bandwidth. thanks for reading

Kim Herron  
[kherron@voyager.net](mailto:kherron@voyager.net) or [kherron@vixa.voyager.net](mailto:kherron@vixa.voyager.net)  
1-616-677-3706

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Date: Thu, 9 Oct 1997 04:36:52 +0000

From: Sandy W5TVW <[ebjr@worldnet.att.net](mailto:ebjr@worldnet.att.net)>

Subject: FS/FT: BIG insulators!

I have seven VERY NICE, high quality, clear glazed steatite, ribbed, 7-1/2" "dogbone" antenna end insulators. These are shipboard babies and very strong. They would make some nice storm-proof dipole/rhombic insulators for someone who wants to use heavy wire. These were used with 7/16 stranded or about 5mm wire. They are unused. They are just too heavy for the kind of antennas I put up!

Would like to trade them for 14-15 end insulators 4" ribbed or 5-6" unribbed, preferably clear or brown glazed ceramic or high quality glass ones. NOT interested in any plastic ones, "strain" egg shaped ones or "johnny balls".

Anybody have anything out there to trade for these puppies?  
They have been hanging around here for a while. As you know, GOOD  
ceramic insulators have gotten pretty pricey!

73,  
E. V. Sandy Blaize, W5TVW  
"Boat Anchors collected, restored, repaired, traded and used!"  
417 Ridgewood Drive  
Metairie, LA., 70001

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Date: Thu, 9 Oct 1997 04:36:58 +0000  
From: Sandy W5TVW <ebjr@worldnet.att.net>  
Subject: WTD: German CRT's

Looking for a couple of D5-100W German CRT tubes. These were used  
in the NLS "Mini-scopes"  
Have for trade some re-boxed but unused RCA 1EP11 CRT's.

Any out there?

73,  
E. V. Sandy Blaize, W5TVW  
"Boat Anchors collected, restored, repaired, traded and used!"  
417 Ridgewood Drive  
Metairie, LA., 70001

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Date: Thu, 9 Oct 1997 01:18:15 -0600 (MDT)  
From: Shane <toyboat@freenet.edmonton.ab.ca>  
Subject: Johnson Air Trimmer Variable Cap

Greetings,

Found a bunch of variable caps :-). All ceramic or isolanite types  
in very useful values for my projects :-). Even a couple of smaller  
Cardwells with removable stator and rotor plates :-).

One Johnson is a butterfly or bow-tie type with two separate stators.  
Really useful as a trimmer because I can use either or both sections,  
individually or together. Can anyone tell me it's capacitance?

The number on it is: 9MB11

Also, how about the Cardwells? The number on these is: ZR-50-AS  
(Could be 50 pF, but it would be nice for verification)

I have had some success with a feeler-gauge/dial vernier caliper/  
capacitance calculation/estimate process, but these caps are probably  
in someone's well-stocked library of old catalogues.

Help much appreciated, fellow keepers of the light.

Shane Wilcox

~~~~~  
Shane <toyboat@freenet.edmonton.ab.ca>  
~~~~~

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Date: Thu, 9 Oct 1997 06:46:32 -0400  
From: "Brian Carling" <bry@mnsinc.com>  
Subject: Re: Hartley Weirdness

This beats me! I have no idea. I do have an 812 here (needs the base re-glued though!) - maybe I will try it some time, but I am not a big fan of QRO Hartleys. A little 5 watt Hartley would be fun for me! Maybe use a wooden cotton reel for a tank coil form just like the one I built as a lad circa 1964....

On 3 Oct 97 at 13:54, rdkeys@csemail.cropsci.ncsu.e wrote:

> >  
> > Bob,  
> > I finally did give up trying to use an 811A in a Hartley but just thought I'd  
> > pass this along as it has me stumped. Using an 811 in a basic shunt-fed  
> > Hartley circuit I couldn't get it to reliably start oscillating every time on  
> > key-down. However, by accident, I found that if I keyed it and moved my hand  
> > around about 6 inches over the top of the rig it would suddenly kick into  
> > oscillation and keep going even when I removed my hand. All it took was a  
> > wave to get it going. Monkeying around with the grid cap and resistor values  
> > and types didn't seem to help. With a 250pf cap and 15 to 27K for a resistor  
> > it would oscillate but only when started with the "magic wave". Maybe I've  
> > developed a new method of keying?  
> >  
> > 73 Eric KALYRV  
> >  
> >  
> The 811's that I have tried were about the same. They seem to have just  
> too low a grid-plate capacity to start oscillations reliably. That is  
> GREAT for amplifiers, but less than optimal for Hartleying.  
>  
> For fun, you might try adding about 10pf of HV cap across the grid and  
> plate leads and see if that helps any. You might also try adjusting  
> the cathode tap up or down to alter the feedback. If the added capacity  
> kicks it off, then the grid-plate capacity is too low to be a good  
> Hartley oscillator. If you have an 812, you might try that. It has  
> a little higher grid-plate capacity if memory serves me correctly.  
>  
> Wave keying..... backshunt..... backwave..... bose (nah....).  
>  
> 73/ZUT DE NA4G/Bob UP  
>  
>  
>  
\*\*\*\*\*  
\*\*\* 73 from Radio AF4K/G3XLQ Gaithersburg, MD USA \*  
\*\* E-mail to: bry@mnsinc.com \*  
\*\*\* ICQ: 3910641 \*\*\*  
\*\* http://www.mnsinc.com/bry/ \*  
\*\*\*\*\*  
AM International #1024, TENTEN #13582. GRID FM19. Using a SWAN 250 on 6m,  
Other rigs: Valiant, DX-60/HG-10, FT-840, TM-261, Ameco TX-62, Gonset Communicator III  
HTX-202...TEN-TEN #13582, DXCC #17,763 Bicentennial WAS

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Date: Thu, 9 Oct 1997 06:46:31 -0400  
From: "Brian Carling" <bry@mnsinc.com>  
Subject: Re: Glowbug Chat Room QSO party!

On 3 Oct 97 at 20:26, Jan wrote:

> Hello, all.  
>  
> The Glowbugs chat room was hot today. I joined at 1200UTC  
> as promised and found VK4AOK, Murray there at once. During  
> a couple of hours KALYRV, KA0GRC, KILKY and KE4000 also  
> joined, one after another. Bry, where were you?

Sorry - they made me go to work early - (sad!)  
Is this going to be a regular thing on the chat page??  
I would like to try it again, especially if we do it on a WEEKEND  
when I am home (maybe this Saturday would be good for some of you???)

> Finally, much later, I found the chat room owner himself,  
> Paul, N6EV.

Did you ask him about the state of his WEB PAGES????  
All that valuable Glowbug material seemed to be gone last time I  
tried to go there!

73 de AF4K, Bry

>  
> At most, 3 were on at the same time. The room works quite  
> well with almost real time response. Sometimes the comments  
> are out of sync but that is to be expected. With 3 on, it  
> was sometimes quite messy <g>. It takes a little time to get  
> used to it.  
>  
> This was real fun and a totally unexpected response, I only  
> expected Bry to show up...  
>  
> I see the room as a valuable tool, there are many uses for it.  
>  
> I will check the room weekdays at 1200UTC, 1300UTC and 1600UTC.  
>  
> Don't forget to keep 'em glowing!  
> Jan, SM5GNN  
>  
>  
\*\*\*\*\*  
\*\*\* 73 from Radio AF4K/G3XLQ Gaithersburg, MD USA \*  
\*\* E-mail to: bry@mnsinc.com \*  
\*\*\* ICQ: 3910641 \*\*\*  
\*\* http://www.mnsinc.com/bry/ \*  
\*\*\*\*\*  
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Date: Thu, 9 Oct 1997 06:46:29 -0400  
From: "Brian Carling" <bry@mnsinc.com>  
Subject: Re: "BA" gathering on CW...

OK Sandy - I hope to see you on 3579 soon. I will crank up the  
Valiant and see if any smoke issues forth!

Grin - Bry, AF4K

On 5 Oct 97 at 16:53, Sandy wrote:

> Hello Fellow CW operators!  
>  
> Summertime brought about a shift to 40 meters to 7050 khz., then  
> some of us  
> wandered around and used 7060 khz. Operations were plagued with Mexican SSB  
> QRM and also lots of "digitalis" working their way down the band, closer and  
> closer  
> to the 7025 "Extra" barrier. Anyway, 40 has become a nightmare at night for the  
> casual operator and ragchewer.  
> 80 meters has again become quiet enough to use again. Soon we will be  
> going off Daylight time, which will allow more darkness earlier, enhancing  
> 80 meters! Drop by evenings at 0100, 0200, 0300Z on 3579.5 and blast forth  
> with a "CQ BA".  
> I hope we will be able to get the group together again this  
> winter....soon.  
> Dust off those old rigs and get them emitting some RF!  
>  
> 73,  
> E. V. Sandy Blaize, W5TVW  
> "Boat Anchors collected, restored, repaired, traded and used!"  
> 417 Ridgewood Drive  
> Metairie, LA., 70001  
>  
>  
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Date: Thu, 09 Oct 1997 14:04:20 +0200  
From: Jan Axing <janax@li.icl.se>  
Subject: Re: Glowbug Chat Room QSO party!

Brian Carling wrote:

>  
> On 3 Oct 97 at 20:26, Jan wrote:  
> <snipped a little>  
> > The Glowbugs chat room was hot today. Bry, where were you?  
>  
> Sorry - they made me go to work early - (sad!)  
> Is this going to be a regular thing on the chat page??

Nah, it was just a call to see if anyone would like to try it.  
My suggestion is to use it for real time discussions after a sked  
set here in the list. At least for me who lives in the future...

> I would like to try it again, especially if we do it on a WEEKEND  
> when I am home (maybe this Saturday would be good for some of you???)

Okay. Saturday Oct 11. I cannot travel back in time so I'll check  
the room at 1200, 1400, 1600, 1800 and continuously between 2000  
and 2200 when the short waves go silent. All times UTC.  
I will also check 14040 and 21040 +-QRM all day from 1200 UTC. Yes,  
15M is coming along fine now, at least some days.  
All reservations for technical disasters apply :-)

> > Finally, much later, I found the chat room owner himself,  
> > Paul, N6EV.  
>  
> Did you ask him about the state of his WEB PAGES????  
> All that valuable Glowbug material seemed to be gone last time I  
> tried to go there!

I think Paul can explain if he gets the chance... Paul gave up  
his provider barepower.net due to reliability problems. The pages  
can be found at <http://www.qsl.net/n6ev/>  
We discovered that Paul's server was down deep in the mud last  
weekend when we were about to upload the scan of a regen receiver  
in the 1950 ARRL handbook. That receiver is on my pages instead.

Paul may have lost a lot of emails lately, if anyone suspect a lost  
mail, try again with the same address.

Don't forget to keep 'em glowing!  
Jan, SM5GNN

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Date: Thu, 9 Oct 1997 06:46:30 -0400  
From: "Brian Carling" <bry@mnsinc.com>  
Subject: Re: Hartley Using an 813

Rod - some people just LIKE doing things the hard way (grin!)

Bry, AF4K

On 3 Oct 97 at 19:10, Rod wrote:

> Hi, folk! I have found, in my junk box, what appears to be a pristine  
> 813, in the box! I read on one of the Glowbug e-mail messages  
> something about using an 813 as a Hartley oscillator. Is it feasible?  
> Is it practical? What sort of voltages should I use? Do I need to  
> tie the screen and plate together so that it will be a de facto triode?  
>  
> Please clue me in. All the chatter about a Hartley has me really curious  
> to build one and use it on the air!  
>  
> Thanks,  
>  
>  
> Rod, N5HV  
> w5hvv@aeneas.net  
>  
>  
>  
>

\*\*\*\*\*

\*\*\* 73 from Radio AF4K/G3XLQ Gaithersburg, MD USA \*  
\*\* E-mail to: bry@mnsinc.com \*  
\*\*\* ICQ: 3910641 \*\*\*  
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AM International #1024, TENTEN #13582. GRID FM19. Using a SWAN 250 on 6m,  
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Date: Thu, 9 Oct 1997 06:46:32 -0400  
From: "Brian Carling" <bry@mnsinc.com>  
Subject: Re: Variable Antenna Coupling and Electrostatic Shielding

On 3 Oct 97 at 9:34, rdkeys@csemail.crops.ci.ncsu.e wrote:

> All of the manual reprints and QST article reprints are on the glowbugs  
> archive site: ftp://piobaire.mines.uidaho.edu/pub/glowbugs  
>  
> All the stuff I write is in postscript, so you will need to find a  
> postscript printer to dump it to, or use ghostscript or something like  
> that.  
>

Hmmmm, well, I have an HP Laser Jet 4 on loan to me. Will THAT work?  
What program do I use to load it first and then print?

ZUT de AF4K  
Bry  
\*\*\*\*\*  
\*\*\* 73 from Radio AF4K/G3XLQ Gaithersburg, MD USA \*  
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HTX-202...TEN-TEN #13582, DXCC #17,763 Bicentennial WAS

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Date: Thu, 9 Oct 1997 11:27:59 -0400 (EDT)  
From: leeboo@ct.net (Leon Wiltsey)  
Subject: power supply needed

>To: gb  
>From: leeboo@ct.net (Leon Wiltsey)  
>Subject: power supply needed  
>Cc:  
>Bcc:  
>X-Attachments:  
>  
>Hi Gang  
>just bought a Heath sb100 and found out it needs an external  
>power supply.. Does anyone have one to sell or a home brew  
>one that will do the job. If I can not find one, I guess I will have to  
>build one and a power trans that will handle a transceiver that puts  
>out 170 watts will be difficult( let alone costly) tnx fellows. 73 73  
>pse email me if you can help. or have one to sell.  
>

Thank the good LORD for all that you have!!!

67yr old semi disabled senior trying to get code speed to 13wpm  
(stroke got my eyesight, balance and coordination) SO ONLY BA'S NO SOLID STATE

Leon (lee) Wiltsey 4600 Lake Haven blvd Sebring fl. 33872 KF4RCL TECK+

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Date: Thu, 9 Oct 1997 10:32:19 -0400 (EDT)  
From: rdkeys@csemail.crops.ci.ncsu.edu  
Subject: Re: Regen Chokes

> Sounds like a pair of 6sn7's would be nice. I would like to use an rf  
> stage and have never had much luck with triodes as rf amps because of  
> oscilations.

At 12-36 volts on the plate of the triode RF stage, it should work fine. At higher than that it will get quite squirrely. All you really need is an isolation stage, and it can run on anything down to maybe 6 volts or so on the plate, and still work fine as an isolation stage. You could put a pot on the plate line and vary the voltage from 0 to 36 volts or so and use it as a means of gain control. I would expect that even with 0 volts on the plate, you would get sufficient coupling in the electron stream to allow it to work as an isolation stage. Remember that in the early days of Armstrong superheterodynes, they did use triodes, because that was all there was in the way of tubes. Although I have never used an RF stage on my homebuilt regens, you should be able to find some info in the early Radio News, QST, and things like Elmer Bucher's Practical Wireless Telegraphy or the book by Leutz on his superhets, or maybe even Mary Loomis's Practical Radio Operating book, that would be of use in the design of an early style triode rf stage.

> I have an old pw dial and cap from an old navy hro receiver that has 4  
> sections. It would be fun to set that up for 80 and 40 meters as a regen  
> with rf amp. This cap is probably worth something to a collector since it  
> is NOS but what good is something if it is not used and it would be real  
> pretty as a regen dial. If I could find a good supply of plug in coil  
> forms I could set it up with two rf stages useing plug in forms for  
> selectivity and a egenerative detector. I could vary the rf gain for  
> optimum signal to the regenerator. would be pretty sensitive.

I would think that would make a very nice regen set tuner. Use about a 25 pf series cap on the high end of each section to cut it down to a reasonable tuning swing. That way you would not have to bother with cutting down the plates. Put a small trimmer on the rf stage to act as a peaking capacitor, maybe a 25pf one would do. You could make the series caps variable trimmers to set the range on each band, perhaps.

You don't really need two rf stages, but could make good use of double tuned primary and secondary circuits to optimize bandpass characteristics with a single triode rf stage. Use a pair of 6SN7's with one as the rf stage and detector and the other as the first and second audio stages. A pair of audio interstage transformers, about 36 plate volts, and a good detector throttle control, and away you go.

> I have a pair of headphones with cotton covered cord that might be neat  
> for the audio output they are ACME Trim Inc. Libertyville, ILL. Do you  
> know what these are. I would guess that they are 2000 ohm or such. What do  
> you know about them.

The Acme sets should be fine. I would expect them to be 1000 or 2000 ohms, for the most part. At low plate voltages, even 600 ohm headsets work very well in regen service, as the plate load of the final audio stage. I don't get real good response out of 300 ohm headsets or 8 ohm headsets, even when coupling with 10ufd condensers. But, your Acme's should do fine. I have tested a number of different Trimm headphones on xtal sets, and found that the Trimm headphones with the small magnets and cases were nowhere near as good as the Trimm headphones with the heavier magnets and cases. Hint.... the heavier your headphones, the better they will usually be. Also, the larger the diaphragms, the better they will usually be, for regen service.

> Kevin Pease  
> WB0JZG  
> Mount Juliet, TN.

Bob/NA4G

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Date: Thu, 9 Oct 1997 11:25:34 -0400 (EDT)  
From: EWoodman@aol.com  
Subject: 6SN7 Regen

> Sounds like a pair of 6sn7's would be nice. I would like to use an rf  
> stage and have never had much luck with triodes as rf amps because of  
> oscilations.

Kevin,  
I built a nice little regen from a copy of an article that Jeff Duntemann sent me. I believe it came from a 1959 Popular Electronics. It uses a 6SN7 for an rf stage and regen detector and a 6V6 or similar for the audio. Works slick and gives you the isolation. The original plan uses a pot for regen control but you can modify that for a variable condenser if you want, however the pot does work fairly well. It also used the old Bud small transmitter coils which were the types that looked like Miniductor mounted horizontally on 5-pin plugs with 2 or 3 turns added around them for a tickler. I just wound my own on some homebrew plug-in forms and changed the antenna coupling

to inductive instead of the direct connect to the coil with series cap.

My other rig just uses one 6SN7 for detector and audio. Just a very basic circuit with a throttle cap for regen control. Maybe not quite as loud or sensitive as the other rig but perfectly adequate.

73 Eric KAIYRV

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Date: Thu, 9 Oct 1997 15:58:35 +0000  
From: Sandy W5TVW <ebjr@worldnet.att.net>  
Subject: RCA "Rocky Point"

Does anyone in the group live on Long Island? RCA in the early 1920's built a site near Rocky Point on Long Island, NY that housed what was to be a collection of Alexanderson alternators. The antenna system was massive and consisted of very tall towers with 150' crossarms to hold the 16 wire "flat-top antennas"

Does this site still exist? Are any of the towers still up? I would assume if still in operation (probably by the government) that the alternators have long since been retired and/or scrapped.

I have references to this place being called "Radio Central" in the 1920's literature. There is even mention of Rocky Point in "Empire of the Air" by Tom Lewis.

I have no idea what the Omega site antennas consisted of, but I'd bet it was something massive.

73,  
E. V. Sandy Blaize, W5TVW  
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End of glowbugs V1 #132  
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Created by **Steve Modena, AB4EL**  
Comments and suggestions to [modena@SunSITE.unc.edu](mailto:modena@SunSITE.unc.edu)

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